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EXAMINER

CHOKSHI, PINKAL R

ART UNIT	PAPER NUMBER
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2623

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,827

Applicant(s)

MA ET AL.

Examiner

Pinkal Chokshi

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,12,15,20,24,26,32,37,40,45,49 and 54-113 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1,7,12,15,20,24,26,32,37,40,45,49 and 54-113 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

- Applicant's preliminary Amendment filed on 6/28/2005 is acknowledged.
- Claims 54, 58, 62-63 have been amended.
- Claims 2-6, 8-11, 13-14, 16-19, 21-23, 25, 27-31, 33-36, 38-39, 41-44, 46-48, 50-53 have been cancelled.
- Claims 64-113 have been added.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 7, 12, 24, 26, 32, 37, and 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al (hereafter referenced as Levitt) in view of US Publication 2003/0126600 A1 to Heuvelman et al (hereafter referenced as Heuvelman).

Regarding **claim 1**, "a scheduling system adapted to avoid scheduling conflicts for use with a hand-held remote control device integrated with multiple information sources" reads on the handheld system that enable user to select audio/video programs that are received from multiple sources (abstract) disclosed by Levitt and represented in Fig. 1.

As to "system comprising: an electronic schedule of personal events adapted to commonly schedule electronic media events with scheduled personal events" Levitt discloses (§§0021 and §§0022) that the handheld device receives programming content EPG data and based on the user profile and past choices, it schedules programs that user might enjoy.

As to "a user interface adapted to simultaneously communicate scheduled personal events and available electronic media events to a user, wherein the scheduled personal events and the available electronic media events have predefined times and durations" Levitt discloses (§§0084 and §§0151) that the user interface handles many tasks including the selection of program content between EPG data and user's profile and past choices where EPG program refers to program's timing and duration information.

Levitt meets all the limitations of the claim except "a scheduling module adapted to identify and resolve a conflict between an electronic media event and a scheduled personal event." However, Heuvelman discloses (§§0008) that the system avoids the conflict of programs by filling the time slots with matching channels of user personal calendar selection and if nothing is selected for a time slot, then it fills the suitable program from all available channels. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to resolve conflict between EPG and personal calendar as taught by Heuvelman in order to ease the selecting and at the same time increases the user-friendliness and level of user control regarding program selection (§§0004).

Regarding **claim 7**, "a clip organization system adapted to organize media-related information for use with a hand-held device comprising: an input receptive of media-related information extracted from a television broadcast stream" Levitt discloses (§§0073) that the handheld device receives and updates its EPG.

As to "a data store storing the media-related information" Levitt discloses (§§0022) that the media directory such EPG data is stored on the handheld device.

As to "an electronic index organizing the media-related information to facilitate retrieval of the media related information by the user" Levitt discloses (§§0026) that the handheld device receives and read the EPG data as represented in Figs. 4D and 4E.

Regarding **claim 12**, "a remote control system adapted to control electronic media devices for use with a had-held remote control device, comprising: a data store storing information relating to electronic media event consumption via the electronic media devices" Levitt discloses (§§0022 and §§0067) that the PDA receives and stores EPG data via one or more electronic devices which are controlled by PDA as represented in Fig. 1 (element 24).

As to "a usage pattern analysis module adapted to perform an analysis of previous user consumption of electronic media events via electronic media

devices, and adapted to anticipating user preferences relating to electronic media event consumption via the electronic media devices based on the analysis” Levitt discloses (¶0021, ¶0254) that the list, presented on handheld device personalized media choices based on the user choices and other profile preference. Also, the list presented to the user can be limited to favorites through analysis of past tuning history.

As to “a user interface adapted to acting on anticipation of user preferences to accomplish improved enjoyment of media content by the user via the electronic media devices” Levitt discloses (¶0085) that based on the user preferences, user interface of handheld device recommends program choices.

Regarding **claim 24**, “an electronic programming guide maintenance system for use with a hand-held device, comprising: an input receptive of identifications of available electronic media content, wherein the identifications are extracted from a broadcast signal operable to deliver the available electronic media content” Levitt discloses (¶0084 and ¶0151) that the user interface in PDA communicates with server system based on the user's profile and past choices to sends/receives program data.

As to “a second input in communication with a communications system having electronic programming guide information providing details relating to the available media content” Levitt discloses (¶0073) that the handheld device receives and updates its EPG and exchange information with server system.

Levitt further discloses (§0151) that the EPG sent to the device, via program database, filters program IDs associated with the programs.

As to "a synchronization engine adapted to construct and maintain links between the identifications of available electronic media content and related electronic programming guide information" Levitt discloses (§0073) that the handheld device updates EPG and exchange information with server system to synchronize personal preferences, content databases and control codes.

Regarding **claim 26**, "a method of avoiding scheduling conflicts for use with a hand-held remote control device integrated with multiple information sources" reads on the handheld system that enable user to select audio/video programs that are received from multiple sources (abstract) disclosed by Levitt and represented in Fig. 1.

As to "method comprising: maintaining an electronic schedule of personal events, wherein the electronic schedule is adapted to commonly schedule electronic media events with scheduled personal events" Levitt discloses (§0021 and §0022) that the handheld device receives programming content EPG data and based on the user profile and past choices, it schedules programs that user might enjoy.

As to "simultaneously communicating scheduled personal events and available electronic media events to a user, wherein the scheduled personal events and the available electronic media events have predefined times and

durations” Levitt discloses (§§0084 and §0151) that the user interface handles many tasks including the selection of program content between EPG data and user’s profile and past choices where EPG program refers to program’s timing and duration information.

Levitt meets all the limitations of the claim except “a scheduling module adapted to identify and resolve a conflict between an electronic media event and a scheduled personal event.” However, Heuvelman discloses (§0008) that the system avoids the conflict of programs by filling the time slots with matching channels of user personal calendar selection and if nothing is selected for a time slot, then it fills the suitable program from all available channels. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to resolve conflict between EPG and personal calendar as taught by Heuvelman in order to ease the selecting and at the same time increases the user-friendliness and level of user control regarding program selection (§0004).

Regarding **claim 32**, “a method of organizing media-related information for use with a hand-held device, comprising: receiving media-related information extracted from a television broadcast stream” Levitt discloses (§0073) that the handheld device receives and updates its EPG.

As to “storing the media-related information in computer memory” Levitt discloses (§0022) that the media directory such EPG data is stored on the handheld device.

As to “organizing the media-related information to facilitate retrieval of the media related information by the user” Levitt discloses (§§0026) that the handheld device receives and read the EPG data as represented in Figs. 4D and 4E.

Regarding **claim 37**, “a method of controlling electronic media devices for use with a had-held remote control device, comprising: performing an analysis of previous user consumption of electronic media events via electronic media devices, wherein the electronic media devices were operated by the user via the hand-held remote control device” Levitt discloses (§§0022 and §§0067) that the PDA receives and stores EPG data via one or more electronic devices which are controlled by PDA as represented in Fig. 1 (element 24).

As to “anticipating user preferences relating to electronic media event consumption via the electronic media devices based on the analysis” Levitt discloses (§§0021, §§0254) that the list, presented on handheld device personalized media choices based on the user choices and other profile preference. Also, the list presented to the user can be limited to favorites through analysis of past tuning history.

As to “acting on anticipation of user preferences to accomplish improved enjoyment of media content by the user via the electronic media devices” Levitt discloses (§§0085) that based on the user preferences, user interface of handheld device recommends program choices.

Regarding **claim 49**, “a method of maintaining an electronic programming guide for use with a hand-held device, comprising: receiving identifications of available electronic media content, wherein the identifications are extracted from a broadcast signal operable to deliver the available electronic media content” Levitt discloses (§§0084 and §0151) that the user interface in PDA communicates with server system based on the user's profile and past choices to sends/receives program data.

As to “communicating with a communications system having electronic programming guide information providing details relating to the available media content” Levitt discloses (§0073) that the handheld device receives and updates its EPG and exchange information with server system. Levitt further discloses (§0151) that the EPG sent to the device, via program database, filters program IDs associated with the programs.

As to “constructing and maintaining links between the identifications of available electronic media content and related electronic programming guide information” Levitt discloses (§0073) that the handheld device updates EPG and exchange information with server system to synchronize personal preferences, content databases and control codes.

3. **Claims 15 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al in view of US Patent 6,040,829 to Croy et al (hereafter referenced as Croy).

Regarding **claim 15**, "an information delivery system adapted to delivering program-related information content to a user via a hand-held device, comprising: a user interface adapted to employ a template assigned to the category to display the program-related information content to the user via an active display of the hand-held device" Levitt discloses (¶0023 and ¶0085) that the user interface of handheld device enables device to display programs and program information in prioritized order.

Levitt meets all the limitations of the claim except "a data decoder adapted to extract program-related information content from a broadcast signal and a parser adapted to identify a category associated with the program-related information content." However, Croy discloses (col.3, lines 35-42; col.8, line 1- col.9, line 35) that the decoder decodes received data stream of predetermined channels as represented in Figs. 1 and 2. Croy further discloses (col.19, lines 11-25) that the user defined categories are marked programs which provide additional information related to programs/channels as represented in Figs. 12, 13, and 44. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the decoded signal as taught by Croy in order to allow received programming to be displayed in different formats to work with multiple electronic devices such as PDA and cell phone.

Regarding **claim 40**, "a method of delivering program-related information content to a user via a hand-held device, comprising: using a pre-defined

template assigned to the category to display the program-related information content to the user via an active display of the hand-held device” Levitt discloses (§0023 and §0085) that the user interface of handheld device enables device to display programs and program information in prioritized order.

Levitt teaches all the limitations of the claim except “extracting program-related information content from a broadcast signal and identifying a category associated with the program-related information content” However, Croy discloses (col.3, lines 35-42; col.8, line 1-col.9, line 35) that the decoder decodes received data stream of predetermined channels as represented in Figs. 1 and 2. Croy further discloses (col.19, lines 11-25) that the user defined categories are marked programs which provide additional information related to programs/channels as represented in Figs. 12, 13, and 44. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the decoded signal as taught by Croy in order to allow received programming to be displayed in different formats to work with multiple electronic devices such as PDA and cell phone.

4. **Claims 20 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al (hereafter referenced as Levitt) in view of US Patent 6,774,926 B1 to Ellis et al (hereafter referenced as Ellis).

Regarding **claim 20**, “a user interface system for use with a hand-held apparatus, comprising: matching engine adapted to match the query to a plurality

of options including at least one of available electronic media events and broadcast channels rendering the electronic media events available to the user” Levitt discloses (§0268) that the system combines the personal profile and user requests to find a match for a viewer.

As to “an active display communicating the plurality of options to the user as a list of ranked options” Levitt discloses (§0085) that the handheld device displays programs based on user's profile and request in prioritized order.

Levitt meets all the limitations of the claim except “a handwriting recognition module adapted to recognize a handwritten user query.” However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 45**, “matching the query to a plurality of options including at least one of available electronic media events and broadcast channels rendering the electronic media events available to the user” Levitt discloses (§0268) that the system combines the personal profile and user requests to find a match for a viewer.

As to “communicating the plurality of options to the user as a list of ranked options” Levitt discloses (§0085) that the handheld device displays programs based on user's profile and request in prioritized order.

Levitt meets all the limitations of the claim except “a method of providing a user interface for use with a hand-held apparatus, comprising: recognizing a handwritten user query” However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

5. **Claims 54-61, 64-71, 74-81, and 104-111** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al (hereafter referenced as Levitt) in view of US Publication 2003/0126600 A1 to Heuvelman et al (hereafter referenced as Heuvelman) as applied to claim 1 above and further in view of US Patent 6,040,829 to Croy et al (hereafter referenced as Croy).

Regarding **claim 54**, “the system further comprising a synchronization engine downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user” Levitt discloses (§0075 and

¶0076) that the additional information related to program could be downloaded to handheld device based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (¶0075) that the additional information could be stored on the handheld device or somewhere remotely.

Levitt meets all the limitation of the claim except “subsequently, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery.” However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 55**, "the system wherein said synchronization engine receives the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 56**, "the system wherein said synchronization engine further stores the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information, regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in

order to remove release time it takes to receive data from server.favorite programs, and setting reminders.

Regarding **claim 57**, "the system wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, and the supplementary information corresponds to another level of EPG contents" Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 58**, "the method further comprising: downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user, wherein the source of supplementary information is different from a source of media content" Levitt discloses (§0075 and §0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to "storing the supplementary information in a content database" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except "subsequent to downloading and storing of the supplementary information, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery." However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 59**, "the method further comprising receiving the media content from a source of media content other than the communications system" Levitt discloses (¶0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 60**, “the method further comprising storing the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information regardless of whether a connection to the source of media content is available at time of delivery” Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 61**, “the method wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, the supplementary information corresponds to another level of EPG contents”

Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 64**, "the system further comprising a synchronization engine downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user" Levitt discloses (§0075 and §0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to "storing the supplementary information in a content database" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except "subsequently, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery." However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and

program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 65**, "the system wherein said synchronization engine receives the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 66**, "the system wherein said synchronization engine further stores the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information, regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the

program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 67**, "the system wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, and the supplementary information corresponds to another level of EPG contents" Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 68**, "the method further comprising: downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user, wherein the source of supplementary information is

different from a source of media content" Levitt discloses (§§0075 and §§0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to "storing the supplementary information in a content database" Levitt discloses (§§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except "subsequent to downloading and storing of the supplementary information, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery." However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 69**, "the method further comprising receiving the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 70**, "the method further comprising storing the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional

information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 71**, “the method wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, the supplementary information corresponds to another level of EPG contents” Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 74**, “the system further comprising a synchronization engine downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user” Levitt discloses (§0075 and §0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except “subsequently, synchronously delivering the supplementary information

with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery.” However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 75**, “the system wherein said synchronization engine receives the media content from a source of media content other than the communications system” Levitt discloses (¶0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 76**, “the system wherein said synchronization engine further stores the media content to which the supplementary information is

related for subsequent, synchronous delivery with the supplementary information, regardless of whether a connection to the source of media content is available at time of delivery” Levitt discloses (¶0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 77**, “the system wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, and the supplementary information corresponds to another level of EPG contents” Levitt discloses (¶0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program

information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 78**, “the method further comprising: downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user wherein the source of supplementary information is different from a source of media content” Levitt discloses (¶0075 and ¶0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (¶0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except “subsequent to downloading and storing of the supplementary information, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery.” However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program

related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 79**, "the method further comprising receiving the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 80**, "the method further comprising storing the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the

source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 81**, "the method wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, the supplementary information corresponds to another level of EPG contents" Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 104**, "the system further comprising a synchronization engine downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user" Levitt discloses (§0075 and

¶0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (¶0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except “subsequently, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery.” However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 105**, "the system wherein said synchronization engine receives the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 106**, "the system wherein said synchronization engine further stores the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information, regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use

additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 107**, “the system wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, and the supplementary information corresponds to another level of EPG contents” Levitt discloses (¶0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 108**, “the method further comprising: downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user, wherein the source of supplementary information is different from a source of media content” Levitt discloses (¶0075 and ¶0076) that the additional information related to program could be downloaded to handheld device from Internet based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (¶0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Heuvelman meets all the limitation of the claim except "subsequent to downloading and storing of the supplementary information, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery." However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 109**, "the method further comprising receiving the media content from a source of media content other than the communications system" Levitt discloses (¶0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 110**, "the method further comprising storing the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 111**, "the method wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, the supplementary information corresponds to another level of EPG contents"

Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

6. **Claims 62, 63, 72, 73, 82, 83, 102, 103, 112, and 113** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al (hereafter referenced as Levitt) in view of US Publication 2003/0126600 A1 to Heuvelman et al (hereafter referenced as Heuvelman) as applied to claim 1 above and further in view of US Patent 6,774,926 B1 to Ellis et al (hereafter referenced as Ellis).

Regarding **claim 62**, Levitt meets all the limitations of the claim except “the system further comprising a handwriting matching engine that analyzes user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches.” However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of

programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 63**, Levitt meets all the limitations of the claim except "the method further comprising: analyzing user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches." However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by

Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 72**, Levitt meets all the limitations of the claim except “the system further comprising a handwriting matching engine that analyzes user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches.” However, Ellis discloses (col.6, lines 56-65) that the user’s input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 73**, Levitt meets all the limitations of the claim except “the method further comprising: analyzing user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches.” However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 82**, Levitt meets all the limitations of the claim except “the system further comprising a handwriting matching engine that analyzes user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection

as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches.” However, Ellis discloses (col.6, lines 56-65) that the user’s input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user’s input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 83**, Levitt meets all the limitations of the claim except “the method further comprising: analyzing user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches.” However, Ellis discloses (col.6, lines 56-

65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 102**, Levitt meets all the limitations of the claim except "the system further comprising a handwriting matching engine that analyzes user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches." However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of

programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 103**, Levitt meets all the limitations of the claim except "the method further comprising: analyzing user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches." However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by

Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 112**, Levitt meets all the limitations of the claim except “the system further comprising a handwriting matching engine that analyzes user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches.” However, Ellis discloses (col.6, lines 56-65) that the user’s input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 113**, Levitt meets all the limitations of the claim except "the method further comprising: analyzing user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches." However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

7. **Claims 84-93** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al (hereafter referenced as Levitt) in view of US Patent 6,040,829 to Croy et al (hereafter referenced as Croy) as applied to claims

15 and 40 above, and further in view of US Patent 6,774,926 B1 to Ellis et al (hereafter referenced as Ellis).

Regarding **claim 84**, "the system further comprising a synchronization engine downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user" Levitt discloses (§§0075 and §§0076) that the additional information related to program could be downloaded to handheld device based on user profile information.

As to "storing the supplementary information in a content database" Levitt discloses (§§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Levitt meets all the limitation of the claim except "subsequently, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery." However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available.

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 85**, "the system wherein said synchronization engine receives the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 86**, "the system wherein said synchronization engine further stores the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information, regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information

are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 87**, "the system wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, and the supplementary information corresponds to another level of EPG contents" Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 88**, "the method further comprising: downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user, wherein the source of supplementary information is different from a source of media content" Levitt discloses (§0075 and §0076) that the additional information related to program could be downloaded to handheld device based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Levitt meets all the limitation of the claim except “subsequent to downloading and storing of the supplementary information, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery.” However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 89**, “the method further comprising receiving the media content from a source of media content other than the communications system” Levitt discloses (§0069) that the entertainment device, which is controlled by

PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 90**, "the method further comprising storing the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information regardless of whether a connection to the source of media content is available at time of delivery' Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 91**, "the method wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, the supplementary information corresponds to another level of EPG contents" Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 92**, Combination of Levitt and Croy meets all the limitations of the claim except "the system further comprising a handwriting matching engine that analyzes user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches." However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to

one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

Regarding **claim 93**, Combination of Levitt and Croy meets all the limitations of the claim except "the method further comprising: analyzing user handwriting inputs character by character using a progressive search that removes search results from and adds search results to a list for final selection as new characters are entered and combined with previously entered characters in a search string, wherein character misrecognition and non-recognition are accommodated by adding misrecognized and non-recognized user handwriting inputs to the search string and looking for approximate matches." However, Ellis discloses (col.6, lines 56-65) that the user's input recognized using handwriting recognition or typing in handheld device display. Ellis further discloses (col.11, lines 26-45) that the search feature allows user to enter letters in the box using pen commands to search for television channels where it provides the list of programs/channels based on user's input as represented in Fig. 13. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the handwritten program in PDA to search for available list of programs as taught by Ellis in order to enable a user to have the ease and convenience of searching and organizing the media events.

8. **Claims 94-101** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0151327 A1 to Levitt et al (hereafter referenced as Levitt) in view of US Patent 6,774,926 B1 to Ellis et al (hereafter referenced as Ellis) as applied to claims 20 and 45 above and further in view of US Patent 6,040,829 to Croy et al (hereafter referenced as Croy).

Regarding **claim 94**, "the system further comprising a synchronization engine downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user" Levitt discloses (§§0075 and §0076) that the additional information related to program could be downloaded to handheld device based on user profile information.

As to "storing the supplementary information in a content database" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Ellis meets all the limitation of the claim except "subsequently, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery." However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information

whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 95**, "the system wherein said synchronization engine receives the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 96**, "the system wherein said synchronization engine further stores the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information, regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy

discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 97**, "the system wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, and the supplementary information corresponds to another level of EPG contents" Levitt discloses (¶0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Regarding **claim 98**, "the method further comprising: downloading supplementary information over a communications system based on identifying information extracted from media content before the supplementary information is requested by a user wherein the source of supplementary information is

different from a source of media content” Levitt discloses (¶0075 and ¶0076) that the additional information related to program could be downloaded from Internet to handheld device based on user profile information.

As to “storing the supplementary information in a content database” Levitt discloses (¶0075) that the additional information could be stored on the handheld device or somewhere remotely.

Combination of Levitt and Ellis meets all the limitation of the claim except “subsequent to downloading and storing of the supplementary information, synchronously delivering the supplementary information with media content to which the supplementary information is related, regardless of whether a connection to the communications system is available at time of delivery.” However, Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 99**, "the method further comprising receiving the media content from a source of media content other than the communications system" Levitt discloses (§0069) that the entertainment device, which is controlled by PDA, receives data from various external sources such as cable, satellite and Internet as well as internal sources such as DVR, CD, etc.

Regarding **claim 100**, "the method further comprising storing the media content to which the supplementary information is related for subsequent, synchronous delivery with the supplementary information regardless of whether a connection to the source of media content is available at time of delivery" Levitt discloses (§0075) that the additional information could be stored on the handheld device or somewhere remotely. However, Levitt does not disclose that the media content is available regardless of source status. Croy discloses (col.8, lines 14-21) that the additional information received with the program from the source is stored in the storage device of handheld device so the user can access this program information whenever he/she desires as represented in Figs. 14, 15. Once the program and program related information are stored in the device memory, device will use its local memory to access data instead of sending a request to third party and for this process to take place there is no need for communication system to be available. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use additional

information stored in the device memory to provide data to user in order to remove release time it takes to receive data from server.

Regarding **claim 101**, "the method wherein the media content to which the supplementary information is related corresponds to one level of EPG contents, the supplementary information corresponds to another level of EPG contents" Levitt discloses (§0217) that the EPG data are received on the handheld device as represented in Fig. 4E and when user clicks on program information, device displays additional information about the related program as represented in Fig. 5 (element 142).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 6,813,619 B2 to Devara et al. discloses storing and using personal profile from the remote device.
- US Patent 6,437,836 B1 to Huang et al. discloses extended functionally remote control device.
- US Publication 2005/0028208 A1 to Ellis et al. discloses interactive television program guide with remote control acces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pinkal Chokshi whose telephone number is 571-270-

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3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PRC/


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